

DPW UPDATE

June 2003

DPW's "Detectives" Track Pollution

by Jessica Eslinger, Editor

You've probably seen them on TV: plain-clothes "stormwater detectives," collecting water samples from drains and gutters across the County, and analyzing them for quality and environmental impact. DPW's six-person Science and Monitoring Group combs watersheds countywide to secure cleaner, safer and prettier waterways in San Diego's unincorporated areas.

Science and Monitoring staff collect and interpret water samples from eight County watersheds, following guidelines set by our Municipal Stormwater Permit. They assess the overall health of water flowing through our storm drain system and prepare reports, for reference at numerous water quality meetings. They also oversee contractor practices, and work as program facilitators between 18 stormwater municipalities, the San Diego Port District, and other local stakeholders like Project Clean Water and the Surfrider Foundation. That's a lot of responsibility for half a dozen people.

"We've divided watersheds into three groups: northern, southern and central," said Jo Ann Weber, supervising environmental health specialist. "Our staff rotates at each of these testing regions."

Their analysis is based on five components, the first of which is stream bioassessment monitoring. In this first task, Science and Monitoring Group samplers check 23 creek or stream sites twice a year for benthic macro invertebrates or "bugs."

The second component, long-term mass loading monitoring, involves chemical and toxicity sampling during three big rainstorms each year.

In coastal storm drain outfall monitoring, the third component, samplers check coastal storm drains and ocean or lagoon receiving waters to make sure quality standards are met.

The fourth component, ambient bay, lagoon and coastal receiving water monitoring, takes place once a year at three locations and involves breaking down sedimentary chemistry to learn how the water around and above might be impacted.



Koether jumps right in, collecting water samples from Keyes Creek, near Highway 15 and Highway 76.

"Working in the field is great," said Chattral Koether, environmental health specialist II. "I really get to know the county's land uses, wildlife, creeks and rivers, so I've gained real perspective on what habitat types are heavily impacted by development and agriculture."

The fifth component or task is dry weather monitoring sampling of over 80 locations, up to three times a year, in search of illegal discharges to the County's waterways. If chemical levels are high and it looks as though a water crime has been committed, samplers follow the toxic trail upstream to identify the culprit and

remind them of our permit obligations.

During a routine sampling excursion in Spring Valley, Koether and past coworker Brian Leslie noticed abnormally high amounts of bacteria and oil/grease. They followed the pollutants

upstream and discovered a 30-member homeless community living among the tall vegetation. After some investigation with another coworker, Brad Richardson, they learned the community had been there for 11 years, something that might have gone undetected if not for the samplers' inquisitiveness.

Koether and the rest of the Science and Monitoring Group, who used to work for DEH are new to the Watershed Protection Program and Weber is looking forward to working with DPW.



“We hope this new combination of resources will allow us to expand and broaden the scope of our program.”

As Weber states, their mantra is “action based on sound science.”

This is visible through the Science and Monitoring Group’s dedication, hard work and research, earning them “expert status” in identifying impaired waterbodies, and developing the Triennial Review of the San Diego Basin, a document outlining best water quality standards in San Diego County.

Koether analyzes samples in her mobile test-kit lab.

What’s the Good Idea?

ALERT transmitter radios are used for flood advisories, storm warnings and general hydrologic data collection. DPW’s Flood Control section replaces its transmitters when they get old or outdated. The transmitters must comply with Federal Communications Commission (FCC) standards. About five years ago, the FCC passed provisions requiring all such transmitters to be narrow-banded by January 2005, for better, clearer information flow.

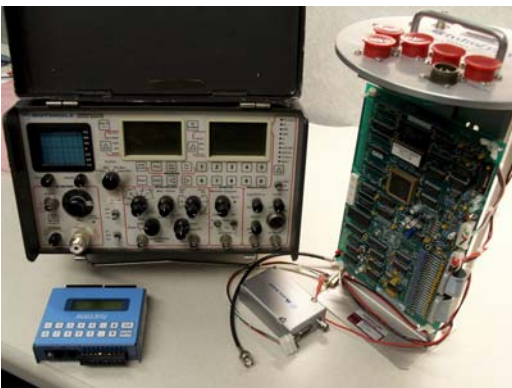
Until now, the Flood Control Section had been purchasing their radios through established flood warning vendors who charged about \$500 per unit. If they had continued to utilize vendors, it would have cost them \$26,500 to purchase and program 53 FCC-approved transmitter radios. To save money, here’s what they did:

Thanks to a good idea from Hydrographic Instrument Technician Mike Jones, Flood Control staff contacted the manufacturers of the FCC-approved radios directly, and were able to negotiate a unit price of \$161. Since Flood Control staff would program the radios themselves, they then looked into programming software, which only cost them \$254. Combining purchases, time spent learning the software and programming the new radios, the Flood Control Section will save taxpayers some \$17,290, once all radios are purchased by the end of Fiscal Year 2004.

“We’re applying this concept to all future purchases with the flood warning system,” said Rand Allan, associate meteorologist.

Allan said that by reducing the unit cost of their purchases, Flood Control staff can stretch their budget further, which increases their capability to keep pace with developing technology and provide enough resources to maintain the County flood warning system at peak efficiency.

Lesson learned? By bypassing the middlemen and practicing self-sufficiency, Jones’s good idea saved money and set a useful example for other penny-wise sections.



The new, smaller transmitter radio (bottom left) is not only cheaper but five times more powerful than the older model (right tower). The switchboard (background) will remain.

STRATEGIC INITIATIVES

by Kirsten Aaboe Hope, Training Coordinator

How do we tie what we do to the Strategic Initiatives of the County? How do we make sure what we do is connected to these goals? First though, what are the three key Strategic Initiatives we're all expected to work toward?

1. Kids
2. The Environment
3. Safe and Livable Communities

These are the initiatives, the priorities that the Board of Supervisors has determined are really important for all of us in the County to focus our efforts on, based on what's important to the residents.

Keeping these in mind makes things simple for me when I'm deciding where to put my 110% at work. I should be able to tie almost everything I do to at least one of these priorities.

It's well documented that the success of an organization is reflected in how well the employees "own" the group's mission. We can take these three initiatives as an expression of our department's mission.

Public Works has a really strong commitment to safety. It's a core value of our department. Much of what we do works to ensure various levels of safety: personal, worksite and community safety. Storm drains are cleared to specs; worksites on the road are flagged properly; roads and intersections are designed to make sure the safe flow of traffic is maximized. We have one of the County's key initiatives clearly built into what we do and how we make decisions.

If we move then to the Environment initiative, we see that recycling goals are set to help the community reduce waste and thereby help the environment. We look at pooling resources to lessen the impact on the environment, or we create education plans to inform the public about watershed protection, utilizing the highest technology with the least environmental impact.

The questions each one of us can ask could be: How is what I'm doing on a daily basis addressing one of these initiatives...How am I choosing to fulfill one of these initiatives? Kids, the Environment, Safe and Livable Communities...they're straightforward. Each of us can get our minds and our work around at least one, if not all of them.

Safety and Wellness

SAFETY INSPECTIONS ARE NOT OVER

by Len Snavely, Safety Officer

Safety Inspections have been conducted throughout the department as a part of meeting our quality first goal this fiscal year. The inspections show we are generally working safely. However, the task of maintaining a safe and healthy work environment is not over. Based on recent observations of job site inspections and recent injuries reported to the Safety Office, here are a few tips to keep us healthy and fit:

- When you see a potential hazard or unsafe situation, take the time to correct it.
- Morning "tailgate" sessions to line out the work to be done should always list possible hazards or risks to avoid. Skipping this task may lead to an injury.
- Supervisors should be sure to clearly specify the Personal Protective Equipment (PPE) clothing or devices to be used.
- When the job calls for a PPE-- use it. Not doing so places you at risk and the department in violation of Cal/OSHA regulations.
- With the approaching hot weather, outside workers should remember to stay hydrated. Take water with you.
- Watch where you are walking and keep your eyes on where you are placing your hands. Trips and pinched fingers can happen "without looking."
- When you check out a vehicle for the day or use a "loaner" while your assigned vehicle is in the shop, check the contents of the first aid kit and condition of the fire extinguisher before you head out.
- Practice defensive driving even when the roadway is clear of other traffic. It's the unseen vehicle that runs into us.

- Practice appropriate breaks from the repetitive motions associated with computer use and other office activities.
- Rather than lifting and carrying those two or three boxes, use a hand truck or dolly or make several trips.

In addition to the “annual facility” inspections and jobsite visits by the Safety Officer, supervisors should conduct frequent safety inspections of their crews or offices; at least monthly. The checklists used by the Safety Officer can be used as a guide for these inspections and can serve as documentation of the inspections to be on file in the supervisor’s office. With each supervisor becoming more “safety conscious” the number of Safety Officers in DPW grows to nearly 200. With each employee becoming “safety conscious,” the number grows to more than 500.

DIVISION NEWS:

Land Development

WATERSHED AWARENESS WEEK

In support of the second annual Clean Water Summit on June 20, Project Clean Water and the County of San Diego initiated Watershed Awareness Week (WAW). This five-day educational event, designed to increase County employee awareness of San Diego watersheds, teaches employees their role in the preservation of local waterways and how to communicate this information to their day-to-day public.



“Employees will gain first-hand water quality knowledge and learn the tools for preventing stormwater pollution both at home and work,” said Cecilia Padres, environmental health specialist for DPW.

June 16 marks the kickoff of WAW, as Deputy Chief Administrative Officer Bob Copper and County Supervisor Greg Cox unveil winners of a children’s poster contest. Throughout the week, BMP demonstrations will be performed amidst general watershed education programs, pollution prevention tips and recycling plan presentations. Visitors will also get special viewing opportunities of vector and street sweeping trucks and equipment.

For more info, log onto the Project Clean Water Web Site at: www.projectcleanwater.org.

Transportation

New Cone Trucks Replace Old Sedans

Striping crews didn’t used to set cones when painting roads. But with so many more drivers on County roadways, potential safety hazards have increased. That’s why new standards were created; requiring “coning” at all designated striping areas. When the standards were set, resources were limited, so the striping crew and Jim Whitlock, DPW fleet coordinator, did the best with what they had and built a makeshift cone vehicle out of an ordinary sedan.

“It was a pretty crude piece of equipment, but the crews made it work,” said Whitlock.

The modified vehicle was used for about a year, while new cone trucks were researched, designed and built from the bottom up. When finished, two tailor-made vehicles found their way to Division 1 Headquarters. They cost \$75,000 each, but they’ve more than paid off in terms of safety, capability and efficiency. Fully equipped with shade canopies, work lights, signboards, shallow seats and the capacity to carry 150 seven-pound cones, the trucks are quicker, more durable and much more rider and traffic friendly. And, because they’re so versatile, they can be used Countywide in emergency situations like floods and mudslides.

But you don’t have to tell the drivers of these vehicles how great they are; “Every day we send one out to follow the striping truck and the other to follow the legend truck,” said Jo Beth Lytle, senior equipment operator of the striping crew.



Senior Equipment Operator Richard Delgado drives while Public Works Trainee Kenny Key sets out cones following a striping crew on Palomar Mountain.

Engineering Services

Ribbon Snip Opens Ramona Sidewalk



With giant scissors in hand, Supervisor Dianne Jacob and the family of the late Robert Salyer snipped a red ribbon and officially dedicated a new one-mile section of sidewalk in Ramona. DPW's Project Manager, Steve Ron, represented the department at the ceremony.

The project includes a sidewalk and pedestrian bridge along Ramona Street, a route used by children to get to school. The bridge was built because of a dip in the road that flooded during rain storms.

Salyer, known as the "Walking Man" for his sojourns throughout the community, was hit by a car and killed just a few steps from where the ceremony was held. The pedestrian bridge is named in his honor.

In addition to the sidewalk and bridge, the \$1 million project included pavement widening and bike lane installation.